REMARKS

Applicant has canceled claims 3 and 9-11 and amended claims 1, 2, 4, 6 and 8, so only claims 1-2 and 4-8 remain.

Of the remaining claims, claims 1, 5 and 6 were rejected on Sewell (4,921,583) while claims 2, 4 and 7-8 were rejected on Sewell in view of Topelian (2,784,151). Applicant confirms his election of invention I.

Claim 1, which has been amended, describes a method for depositing precious metal onto an area (the area within the opening in mask 50 of Fig. 6) on a face (70) of a metal substrate. The method includes maintaining a nonconductive screen (14) with a plurality of holes (28, Fig. 8) that cover the area of the face, closely between the mask and substrate. As described in the specification, this results in depositing the precious metal in a pattern such as shown in Fig. 4 with peaks (34) and valleys (54, where a thread of the screen lies close to the substrate), which saves the amount of precious metal used and produces a desirable rough surface.

In Sewell his Fig. 2 shows a method for depositing metal through an opening ((8) in a mask (7) onto a substrate (1). However, there is no screen between his mask and substrate. Also, there is no screen with a plurality of holes that cover the area of the opening (8). As a result, the method of Sewell would not produce the pattern of peaks and valleys 95 shown in applicant's Fig. 4 in the deposited layer. Accordingly, applicant believes that claim 1, as now amended, should be allowed.

Claim 2, which has been amended and which depends from claim 1, describes the screen as formed of multiple nonconductive round threads. Sewell does not show a screen. Topelian shows a conductive screen B that lies in electrolyte tightly around a drill (col. 3, lines 15-18). His screen B is of conductive material (col. 2, lines 70-72), rather than nonconductive material. The effect he achieves is to avoid burrs (treed") on the plated drill edges, rather than a surface

with peaks and valleys. Since Topelian does not use applicant's method (a nonconductive screen between a mask and substrate) and his method is for a different result (to avoid burrs on cutting edges, not to produce a rough surface), his method cannot be combined with Sewell which shows no screen, to achieve applicant's method.

Claim 4, which depends from claim 1 and has been amended, describes tiny openingsin the screen, and with the area to be plated (in the opening of the mask50 of Fig. 6) having a length a plurality of times greater than the screen hole length. Topelian shows small screen holes, but his screen is of conductive material and produces a very different result.

Claim 5, which depends from claim 1, describes the mask being of elastomeric material and being pressed against the screen. The mask of Sewell is pressed against the substrate, but it is not elastomeric so it would not press all portions of a screen (which he does not show) against his substrate.

Claim 6 describes apparatus for electrodepositing metal on a face of a substrate, through an opening in a mask. The apparatus includes a screen that lies against the face, in alignment with the mask opening, and that has a plurality of holes in line with the mask opening. In Sewell he does not use a screen with small holes.

Claim 7, which depends from claim 6 and which has been amended, describes the screen formed of woven round threads of nonconductive material. Only Topelian shows a screen, and his screen is conductive.

Claim 8, which depends from claim 6 and which has been amended describes screen holes with a length on the order of 85 microns (0.085mm), and the mask opening having a greater length. This results in microscopic roughness. Neither of the references have a screen with microscopic holes, or produces microscopic roughness.

In view of the above, favorable reconsideration of the application is courteously requested.

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